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441/1/019

PATENT APPLICATION

#2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Madoka TONOSAKI et al

SERIAL NO.: Unassigned

FILED : December 30, 2004

FOR : NOVEL FUNCTIONAL PEPTIDE NUCLEIC ACID
AND PROCESS FOR PRODUCING THE SAMECertificate of Mailing By Express Mail Under 37 CFR 1.10Express Mail "Mailing Label No.": ED 173244275 USDate of Deposit : DECEMBER 30, 2004

I hereby certify that this paper and/or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to Mail Stop PCT, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450 on DECEMBER 30, 2004.

Richard M. Goldberg(Name of Registered Representative
and person mailing)Richard M. Goldberg Dec. 30,
2004
(Signature and Date)INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicants and those individuals involved in the preparation and/or prosecution of the above-identified Application have become aware of the following references which the Examiner may consider material to the patentability of the above-identified Application:

<u>U.S. PATENT NO.</u>	<u>DATE</u>	<u>PATENTEE</u>
6,809,190	10-26-2004	Ikeda et al

PUBLICATIONS

KISFALUDY et al, Synthesis, 1983, (4), pp. 325-327.

ARMITAGE, BRUCE et al, Peptide Nucleic Acid (PNA)/DNA Hybrid Duplexes: Intercalation by an Internally Linked Anthraquinone, Nucleic Acids Research, 1998, Vol. 26, No. 3, pp 715-720.

DUEHOLM, KIM L. et al, Synthesis of Peptide Nucleic Acid Monomers Containing the Four Natural Nucleobases: Thymine, Cytosine, Adenine, and Guanine and their Oligomerization, J. Am. Chem. Soc. 1994, Vol. 59, pp 5767-5773.

EGHOLM, MICHAEL et al, Peptide Nucleic Acids (PNA), Oligonucleotide Analogues with an Achiral Peptide Backbone, J. Am. Chem. Soc. 1992, Vol. 114, pp 1895-1897.

EGHOLM, MICHAEL et al, Recognition of Guanine and Adenine in DNA by Cytosine and Thymine Containing Peptide Nucleic Acids (PNA), J. Am. Chem. Soc. 1992, Vol. 114, pp 9677-9678.

HANVEY, JEFFERY C. et al, Antisense and Antigene Properties of Peptide Nucleic Acids, Science, Vol. 258, November 27, 1992, pp 1481-1485.

LOHSE, JESPER et al, Fluorescein-Conjugated Lysine Monomers for Solid Phase Synthesis of Fluorescent Peptides and PNA Oligomers, Bioconjugate Chem., Vol. 8, 1997, pp 503-509.

NIELSEN, PETER E. et al, Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide, Science, Vol. 254, December 6, 1991, pp. 1497-1500.

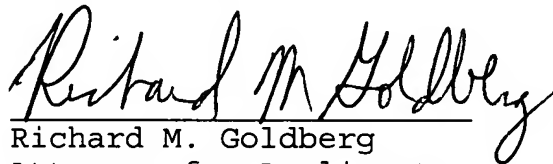
THOMSON, STEPHEN A. et al, Fmoc Mediated Synthesis of
Peptide Nucleic Acids, Tetrahedron, Vol. 51, No. 22, 1995, pp
6179-6194.

Copies of the above references are enclosed.

In addition, one Form PTO/SB/08A Form is enclosed, which
lists the above references. It is requested that the Examiner
initial this Form and return a copy thereof to the undersigned.

It is requested that the above-identified references be made
of record in the present Application.

Respectfully submitted,



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If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	
		Filing Date	12-30-2004
		First Named Inventor	Madoka TONOSAKI ..
		Art Unit	
		Examiner Name	
Sheet 2	of 2	Attorney Docket Number	441/1/019

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		KISFALUDY et al, Synthesis, (4), pp. 325-327.	
		ARMITAGE, BRUCE et al, Peptide Nucleic Acid (PNA)/DNA Hybrid Duplexes: Intercalation by an Internally Linked Anthraquinone, Nucleic Acids Research, 1998, V. 26, No. 3, 715-20	
		DUEHOLM, KIM L. et al, Synthesis of Peptide Nucleic Acid Monomers Containing the Four Natural Nucleobases .. J. Am. Chem. Soc. 1994, Vol. 59, 5767-5773.	
		EGHOLM, MICHAEL et al, Peptide Nucleic Acids (PNA), Oligonucleotide Analogues with an Achiral Peptide Backbone, J. Am. Chem. Soc. 1992, Vol. 114, 1895-1897.	
		EGHOLM, MICHAEL et al, Recognition of Guanine and Adenine in DNA by Cytosine and Thymine Containing Peptide Nucleic Acids (PNA), J. Am. Chem. Soc. 1992, Vol. 114, 9677-9678	
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		THOMSON, STEPHEN A. et al, Fmoc Mediated Synthesis of Peptide Nucleic Acids, Tetrahedron, Vol. 51, No. 22, 1995, 6179-6194.	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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